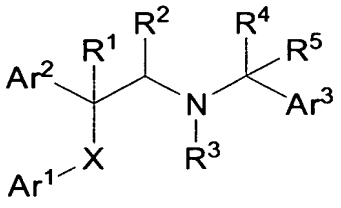
IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original). A compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R^1 is selected from:

(1) hydrogen,

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents,

(3) halogen, and

(4) -OR^d;

R^2 is selected from:

(1) hydrogen,

(2) C_{1-4}alkyl, and

(3) aryl,

wherein each alkyl and aryl moiety is unsubstituted or substituted with 1, 2 or 3 R^e substituents;

R^3 is selected from:

(1) hydrogen, and

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents;

R^4 is selected from:

(1) hydrogen,

(2) C_{1-10}alkyl,

(3) C_{2-10}alkenyl,

(4) C_{2-10}alkynyl,

(5) C_{1-10}alkyloxycarbonyl-, and

(6) C_{3-10}cycloalkyl,

(7) aryl-C_{1-6}alkyl-, and

(8) heteroaryl-C_{1-6}alkyl-,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^a and each aryl, heteroaryl, and cycloalkyl

moeity is unsubstituted or substituted with one, two or three substituents independently selected from R^b and oxo;

R^5 is selected from:

(1) hydrogen, and

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents;

Ar^1 is selected from:

(1) C_{1-10}alkyl,

(2) C_{2-10}alkenyl,

(3) C_{2-10}alkynyl,

(4) C_{3-10}cycloalkyl,

(5) cycloheteroalkyl,

(6) aryl, and

(7) heteroaryl,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one to three substituents independently selected from R^a;

each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b; and

each cycloalkyl and cycloheteroalkyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b and oxo;

Ar^2 is selected from:

(1) $-OR^d$,

(2) $-CO_2R^d$,

(3) C_{3-10}cycloalkyl,

(4) cycloheteroalkyl,

(5) aryl, and

(6) heteroaryl,

wherein each cycloalkyl, cycloheteroalkyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b and oxo; and each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b;

Ar^3 is selected from:

(1) cycloalkyl,

(2) aryl, and

(3) heteroaryl,

wherein each cycloalkyl, aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b;

X is selected from:

(1) a bond,
(2) C_{1-4}alkyl,
(3) oxygen,
(4) sulfur, and
(5) $-NR^c-$,

provided that when X is oxygen, sulfur, or $-NR^c-$, then R^1 is hydrogen or C_{1-4}alkyl and Ar^2 is not $-OR^d$;

each R^a is independently selected from:

(1) $-OR^d$,
(2) $-NR^cS(O)_mR^d$,
(3) halogen,
(4) $-SR^d$,
(5) $-S(O)_mR^d$,
(6) $-S(O)_mNR^cR^d$,
(7) $-NR^cR^d$,
(8) $-C(O)R^d$,
(9) $-CO_2R^d$,
(10) -CN,
(11) $-C(O)NR^cR^d$,
(12) $-NR^cC(O)R^d$,
(13) $-NR^cC(O)OR^d$,
(14) $-NR^cC(O)NR^cR^d$,
(15) $-CF_3$,
(16) $-OCF_3$, and
(17) cycloheteroalkyl;

each R^b is independently selected from:

(1) R^a,
(2) C_{1-10}alkyl,
(3) aryl,
(4) arylC_{1-4}alkyl,
(5) heteroaryl, and
(6) heteroarylC_{1-4}alkyl,

wherein aryl and heteroaryl moieties are unsubstituted or substituted with one, two or three substituents independently selected from R^f;

R^c and R^d are independently selected from:

(1) hydrogen,
(2) C_{1-10}alkyl,
(3) C_{2-10} alkenyl,
(4) cycloalkyl,
(5) cycloalkyl-C_{1-10}alkyl-,
(6) cycloheteroalkyl,
(7) cycloheteroalkyl-C_{1-10} alkyl-,
(8) aryl,
(9) heteroaryl,
(10) aryl-C_{1-10}alkyl-, and
(11) heteroaryl-C_{1-10}alkyl-, or

R^c and R^d together with the atom(s) to which they are attached form a heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-Rg,

each R^c and R^d are unsubstituted or substituted with one to three substituents selected from R^h;

R^e is selected from:

(1) hydroxy,
(2) methoxy-,
(3) trifluoromethoxy-,
(4) methylcarbonyloxy-,
(5) halogen, and
(6) cyano;

R^f is selected from:

(1) halogen,
(2) methyl,
(3) cyano, and
(4) amino;

each Rg is independently selected from

(1) C_{1-10}alkyl, and
(2) -C(O)R^i;

each R^h is independently selected from:

(1) halogen,
(2) C_{1-10}alkyl,
(3) -O-C_{1-4}alkyl,
(4) -S-C_{1-4}alkyl,
(5) -CN,

(6) $-NO_2$,
(7) $-CF_3$, and
(8) $-OCF_3$;

each R^i is independently selected from:

(1) hydrogen,
(2) C_{1-10}alkyl,
(3) C_{2-10} alkenyl,
(4) cycloalkyl,
(5) cycloalkyl-C_{1-10}alkyl-,
(6) cycloheteroalkyl,
(7) cycloheteroalkyl-C_{1-10} alkyl-,
(8) aryl,
(9) heteroaryl,
(10) aryl-C_{1-10}alkyl-, and
(11) heteroaryl-C_{1-10}alkyl-; and

m is selected from 1 and 2.

Claim 2 (original). The compound according to Claim 1, wherein:

X is selected from:

(1) a bond,
(2) $-CH_2-$,
(3) oxygen, and
(4) sulfur,

provided that when X is oxygen, or sulfur, then R^1 is hydrogen or C_{1-4}alkyl, and Ar^2 is not $-OR^d$;

each R^a is independently selected from:

(1) $-OR^d$,
(2) $-NHS(O)_2R^d$,
(3) halogen,
(4) $-SR^d$,
(5) $-S(O)_2R^d$
(6) $-S(O)_2NR^cR^d$,
(7) $-NR^cR^d$,
(8) $-C(O)R^d$,
(9) $-CO_2R^d$,
(10) -CN,

(11) -C(O)NR^{c}R^d,
(12) -NHC(O)R^d,
(13) -NHC(O)OR^d,
(14) -NHC(O)NR^{c}R^d,
(15) -CF_3, and
(16) -OCF_3;

each R^b is independently selected from:

(1) R^a,
(2) C_{1-3}alkyl,
(3) phenyl, and
(4) heteroaryl,

wherein aryl and heteroaryl moieties are unsubstituted or substituted with one or two substituents independently selected from R^f;

each R^c is selected from hydrogen and methyl, and each R^d is selected from:

(1) hydrogen,
(2) C_{1-6}alkyl,
(3) cycloalkyl,
(4) cycloalkyl-C_{1-3}alkyl-,
(5) cycloheteroalkyl,
(6) cycloheteroalkyl-C_{1-3} alkyl-,
(7) phenyl,
(8) pyridyl,
(9) triazolyl,
(10) pyrazolyl
(11) phenyl-C_{1-3}alkyl-,
(12) pyridyl-C_{1-3}alkyl-,
(13) triazolyl-C_{1-3}alkyl-, and
(14) pyrazolyl-C_{1-3}alkyl-,

wherein each R^c and R^d may be unsubstituted or substituted with one to three substituents selected from R^h;

and pharmaceutically acceptable salts thereof.

Claim 3 (original). The compound according to Claim 2, wherein: R^1, R^3 and R^5 are each hydrogen; R^2 is selected from C $_{1-4}$ alkyl and phenyl; and pharmaceutically acceptable salts thereof.

Claim 4 (original). The compound according to Claim 3, wherein:

R^4 is selected from:

(1) C_{1-6}alkyl,

(2) C_{1-5}alkyloxycarbonyl-, and

(3) C_{3-6}cycloalkyl,

(4) aryl-C_{1-3}alkyl-, and

(5) heteroaryl-C_{1-3}alkyl-,

wherein each alkyl moiety is unsubstituted or substituted with one to two substituents independently selected from R^a and each aryl, heteroaryl and cycloalkyl moeity is unsubstituted or substituted with a hydroxy or oxo substituent;

Ar^1 is selected from:

(1) C_{1-10}alkyl,

(2) C_{3-10}cycloalkyl,

(3) cycloheteroalkyl,

(4) phenyl, and

(5) heteroaryl,

wherein each alkyl moiety is unsubstituted or substituted with one to three substituents independently selected from R^a,

each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b, and

each cycloalkyl and cycloheteroalkyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b and oxo;

Ar^2 is selected from: aryl and heteroaryl, wherein aryl and heteroaryl are optionally substituted with one to four substituents independently selected from R^b;

and pharmaceutically acceptable salts thereof.

Claim 5 (currently amended). The compound according to Claim 4, wherein: Ar^3 is cyclohexyl or phenyl, unsubstituted or substituted with one or two substituents selected from halogen, cyano, -CH_3, -OCH_3, -CF_3, -OCF_3, -CO_2CH_3, -SCH_3, -$S(O)CH_3$, -$S(O)_2CH_3$, -$C(O)N(CH_3)_2$, phenyl, pyridinyl, pyrimidinyl, pyrazolyl, pyrrolyl, triazolyl, -NH-R^d wherein phenyl and heteroaryl moieties are unsubstituted or substituted with a substituent selected from halogen, methyl, cyano and amino, and pharmaceutically acceptable salts ~~therof~~ thereof.

Claim 6 (original). The compound according to Claim 5, wherein: R^2 is methyl, X is –CH_2-, Ar^1 is 4-chlorophenyl, and Ar^2 is 3-cyanophenyl.

Claim 7 (original). The compound according to Claim 1 selected from: 3-(1(S)(4-chlorobenzyl)-2(S)-((2-hydroxy-2-methyl-1-phenylpropyl)amino)propyl)benzonitrile, methyl ((3-(4-chlorophenyl)-2(S)-(3-cyanophenyl)-1(S)-methyl-propyl)amino)(phenyl)acetate, 3-(1(S)-1-(4-chlorobenzyl)-2(S)-((2-hydroxy-1-phenylethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((2-methoxy-1-phenylethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-chlorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,5-difluorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)-benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2-chlorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)-benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-chlorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)-benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2,4-difluorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,4-difluorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2-chloro-4-fluorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2-fluoro-4-chlorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-fluorophenyl)-2-hydroxy-2-methyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-(((1-hydroxycyclobutyl)-(3,5-difluorophenyl)methyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-(((1-hydroxycyclohexyl)-(3,5-difluorophenyl)methyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,5-difluorophenyl)-2-hydroxy-2-ethyl-butyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,5-difluorophenyl)-2-hydroxy-2-methoxymethyl-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,5-difluorophenyl)-2-hydroxy-propyl)amino)propyl)-benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-3-hydroxy-2,2-dimethylpropyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl)-2-acetylamino-propyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-t-butyloxycarbonylaminoethyl)-amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-aminoethyl)-amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-cyanoethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-cyano-2-methylpropyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,5-difluorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-methanesulfonylethyl)amino)propyl)benzonitrile, and pharmaceutically acceptable salts thereof.

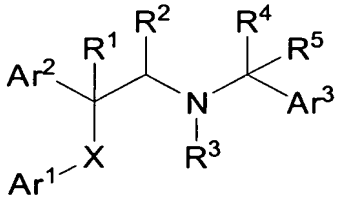
Claim 8 (original). The compound according to Claim 1 selected from: 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-(1H-pyrazol-1-yl)ethyl) amino)propyl)benzonitrile , 3-(1(S)-(4-chlorobenzyl)-2(S)-((2-methyl-1-phenyl-2-(1H-pyrazol-1-yl)propyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-phenyl-2-(1H-1,2,4-triazol-1-yl)ethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((2-(2-oxopyridin-1(2H)-yl-1-phenyl-ethyl) amino)propyl)benzonitrile,

3-(1(S)-(4-chlorobenzyl)-2(S)-((1-biphenyl-4-yl-2-cyanoethylamino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-biphenyl-4-yl-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-bromophenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-chlorophenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-fluorophenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-chlorophenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-trifluoromethylphenyl)-2-cyano-ethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-trifluoromethylphenyl)-2-cyano-ethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methylphenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methoxycarbonylphenyl)-2-cyanoethyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-trifluoromethoxyphenyl)-2-cyanoethyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methylphenyl)-2-cyanoethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2-chlorophenyl)-2-cyanoethyl)amino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,4-dichlorophenyl)-2-cyanoethyl) amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-cyanophenyl)-2-cyanoethyl)amino) propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-cyanophenyl)-2-cyano-2-methyl-propyl)amino) propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-cyclohexyl-2-cyanoethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methylthiophenyl)-2-cyanoethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-cyanophenyl)-2-cyanoethyl) amino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methoxyphenyl)-2-cyanoethyl) amino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methylthiophenyl)-2-cyano-ethyl)amino)propyl)benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-biphenyl-3-yl-2-cyanoethyl) amino)propyl)benzonitrile, 64523-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-dimethylaminocarbonylphenyl)-2-cyanoethyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-dimethylaminocarbonylphenyl)-2-cyano-2-methylpropyl)amino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-pyrrol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-pyrazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-imidazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-chlorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile, 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-fluorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-chlorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-trifluoromethylphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-trifluoromethylphenyl)-2-cyano-2-methylpropyl)amino)propyl)

benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methylphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methoxycarbonylphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-trifluoromethoxyphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methylphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-cyanophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3,4-dichlorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(2-chlorophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methylthiophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methoxyphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methylthiophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-phenylphenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-bromophenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-cyclohexyl-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-pyrazol-3-yl)phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-pyridin-4-yl-phenyl)-2-cyano-2-methylpropyl)amino) propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-pyridin-3-yl-phenyl)-2-cyano-2-methylpropyl)amino) propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4'-cyanobiphen-4-yl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-pyrimidin-5-yl-phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(2-fluoropyridin-4-yl)-phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4'-cyanobiphen-3-yl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-pyridin-3-yl-phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-pyrimidin-5-yl-phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-pyridin-4-yl-phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-pyrazol-3-yl)-phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3'-cyanobiphen-3-yl)-2-cyano-2-methylpropyl)amino) propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methanesulfonylphenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-methanesulfinylphenyl)-2-cyano-2-methylpropyl)amino)

propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methanesulfonylphenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-methanesulfinylphenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-1,2,4-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl) amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-1,2,5-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-1,2,3-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino)propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-1,2,4-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-1,2,5-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-1,2,3-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-pyrazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-pyrazol-3-ylamino)phenyl)-2-cyano-2-methylpropyl)amino)propyl) benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(1H-1,2,4-triazol-3-ylamino)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(4-(3-amino-1H-1,2,4-triazol-1-yl)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-pyrazol-3-ylamino)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(1H-1,2,4-triazol-3-ylamino)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), 3-(1(S)-(4-chlorobenzyl)-2(S)-((1-(3-(pyridine-2-ylamino)phenyl)-2-cyano-2-methylpropyl)amino) propyl)benzonitrile (diastereomer A), and pharmaceutically acceptable salts thereof.

Claim 9 (original). A compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R^1 is selected from:

(1) hydrogen,

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents,

(3) halogen, and

(4) -OR^d;

R^2 is selected from:

(1) hydrogen,

(2) C_{1-4}alkyl, and

(3) aryl,

wherein each alkyl and aryl moiety is unsubstituted or substituted with 1, 2 or 3 R^e substituents;

R^3 is selected from:

(1) hydrogen, and

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents;

R^4 is selected from:

(1) hydrogen,

(2) C_{1-10}alkyl,

(3) C_{2-10}alkenyl,

(4) C_{2-10}alkynyl,

(5) C_{1-10}alkyloxycarbonyl-, and

(6) C_{3-10}cycloalkyl,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^a and each cycloalkyl moeity is unsubstituted or substituted with one, two or three substituents independently selected from R^b;

R^5 is selected from:

(1) hydrogen, and

(2) C_{1-4}alkyl, unsubstituted or substituted with 1, 2 or 3 R^e substituents;

Ar^1 is selected from:

(1) C_{1-10}alkyl,

(2) C_{2-10}alkenyl,

(3) C_{2-10}alkynyl,

(4) C_{3-10}cycloalkyl,

(5) cycloheteroalkyl,.

(6) aryl, and

(7) heteroaryl,

wherein each alkyl, alkenyl, and alkynyl moiety is unsubstituted or substituted with one to three substituents independently selected from R^a,

each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b,and

each cycloalkyl and cycloheteroalkyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b and oxo;

Ar^2 is selected from:

(1) $-OR^d$,
(2) $-CO_2R^d$,
(3) C_{3-10}cycloalkyl,
(4) cycloheteroalkyl,
(5) aryl, and
(6) heteroaryl,

wherein each cycloalkyl, cycloheteroalkyl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b and oxo; and each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b;

Ar^3 is selected from:

(1) aryl, and
(2) heteroaryl,

wherein each aryl and heteroaryl moiety is unsubstituted or substituted with one to four substituents independently selected from R^b;

X is selected from:

(1) a bond,
(2) C_{1-4}alkyl,
(3) oxygen,
(4) sulfur, and
(5) $-NR^c-$,

provided that when X is oxygen, sulfur, or $-NR^c-$, then R^1 is hydrogen or C_{1-4}alkyl and Ar^2 is not $-OR^d$;

each R^a is independently selected from:

(1) $-OR^d$,
(2) $-NR^cS(O)_mR^d$,
(3) halogen,
(4) $-SR^d$,
(5) $-S(O)_mR^d$,
(6) $-S(O)_mNR^cR^d$,
(7) $-NR^cR^d$,
(8) $-C(O)R^d$,
(9) $-CO_2R^d$,
(10) -CN,
(11) $-C(O)NR^cR^d$,

(12) $-NR^cC(O)R^d$,

(13) $-NR^cC(O)OR^d$,

(14) $-NR^cC(O)NR^cR^d$,

(15) $-CF_3$,

(16) $-OCF_3$, and

(17) cycloheteroalkyl;

each R^b is independently selected from:

(1) R^a,

(2) C_{1-10}alkyl,

(3) aryl,

(4) arylC_{1-4}alkyl,

(5) heteroaryl, and

(6) heteroarylC_{1-4}alkyl;

R^c and R^d are independently selected from:

(1) hydrogen,

(2) C_{1-10}alkyl,

(3) C_{2-10} alkenyl,

(4) cycloalkyl,

(5) cycloalkyl-C_{1-10}alkyl-,

(6) cycloheteroalkyl,

(7) cycloheteroalkyl-C_{1-10} alkyl-,

(8) aryl,

(9) heteroaryl,

(10) aryl-C_{1-10}alkyl-, and

(11) heteroaryl-C_{1-10}alkyl-, or

R^c and R^d together with the atom(s) to which they are attached form a heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-Rg,

each R^c and R^d are unsubstituted or substituted with one to three substituents selected from R^h;

R^e is selected from:

(1) hydroxy,

(2) methoxy-,

(3) trifluoromethoxy-,

(4) methylcarbonyloxy-,

(5) halogen, and

(6) cyano;

each Rg is independently selected from

(1) C_{1-10}alkyl, and

(2) -C(O)R^i;

each R^h is independently selected from:

(1) halogen,

(2) C_{1-10}alkyl,

(3) -O-C_{1-4}alkyl,

(4) -S-C_{1-4}alkyl,

(5) -CN,

(6) $-NO_2$,

(7) $-CF_3$, and

(8) $-OCF_3$;

each R^i is independently selected from:

(1) hydrogen,

(2) C_{1-10}alkyl,

(3) C_{2-10} alkenyl,

(4) cycloalkyl,

(5) cycloalkyl-C_{1-10}alkyl-,

(6) cycloheteroalkyl,

(7) cycloheteroalkyl-C_{1-10} alkyl-,

(8) aryl,

(9) heteroaryl,

(10) aryl-C_{1-10}alkyl-, and

(11) heteroaryl-C_{1-10}alkyl-; and

m is selected from 1 and 2.

Claim 10 (original). A composition comprising a compound according to Claim 1 and a pharmaceutically acceptable carrier.

Claims 11-15 (cancelled).

Claim 16 (new). A method of treating a disease mediated by the Cannabinoid-1 receptor in a human patient in need of such treatment comprising administration of a non-toxic, therapeutically effective amount of a compound according to Claim 1.

Claim 17 (new). The method according to Claim 16, wherein the disease mediated by the Cannabinoid-1 receptor is selected from: psychosis, memory deficit, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders, cerebral vascular accidents, head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, schizophrenia, substance abuse disorders, constipation, chronic intestinal pseudo-obstruction, cirrhosis of the liver, asthma, obesity, and other eating disorders associated with excessive food intake.

Claim 18 (new). The method according to Claim 17, wherein the disease mediated by the Cannabinoid-1 receptor is selected from obesity, bulimia nervosa, and compulsive eating disorders.

Claim 19 (new). The method according to Claim 18 wherein the eating disorder associated with excessive food intake is obesity.

Claim 20 (new). A method for preventing obesity in a person at risk therefor comprising administration to the person of about 0.001 mg/kg to about 100 mg/kg of a compound according to Claim 1.